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POPULAR WOODWORKING

AUGUST, 2003, #135

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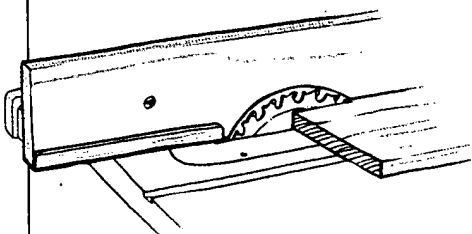
Popular Woodworking

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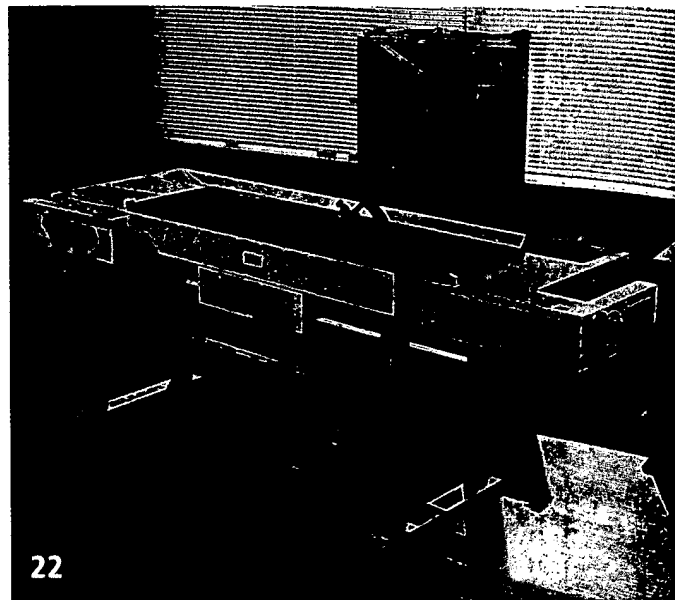


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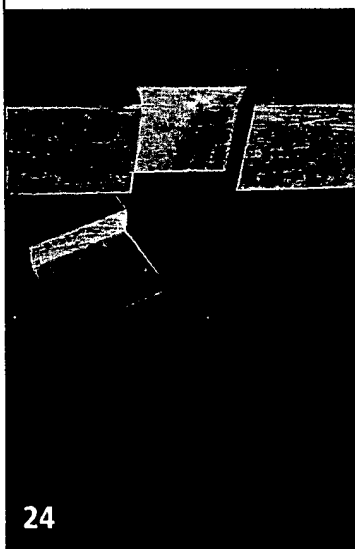
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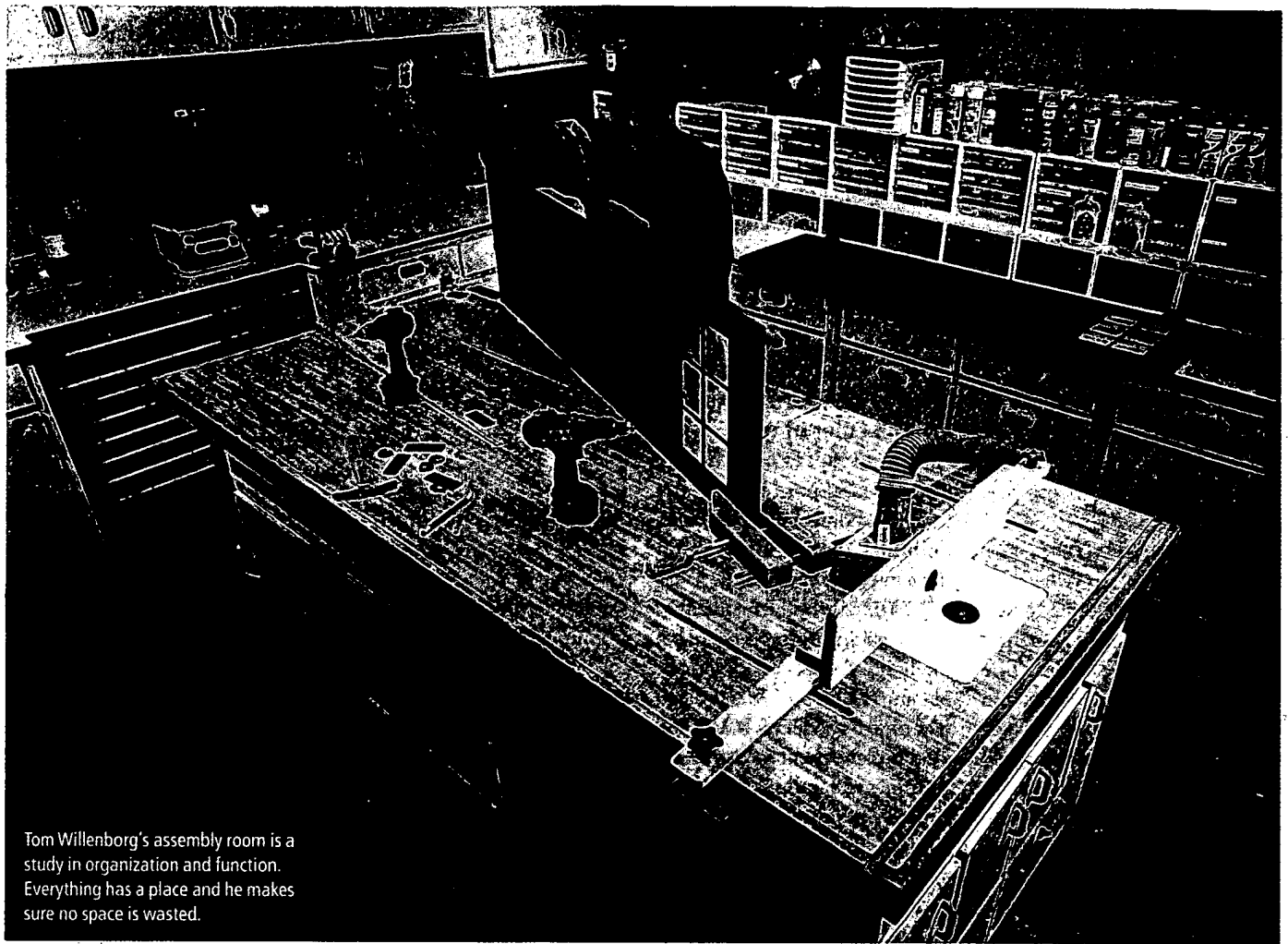
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Tom Willenborg's assembly room is a study in organization and function. Everything has a place and he makes sure no space is wasted.

Photo by Al Parrish

What Makes an Ultimate Workshop?

Take a peek inside two ultimate shops and get ideas for what might work for your own.

Most woodworkers have seen Norm Abrams' shop on "The New Yankee Workshop" and drooled over both the machinery and the acres of workspace. For many, it's the ultimate shop.

Unfortunately the average woodworker is more likely faced with using the garage or basement. That doesn't mean it can't be an ultimate workshop; it just means you need a different approach to layout and organization while recognizing that compromises are necessary.

Speaking of compromises, DIY, the Do It Yourself Network, recently set out to demonstrate to viewers how to set up a woodworking shop,

by David Thiel

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or david.thiel@fwpubs.com

an auto mechanic shop and a gardening work area! If you want to see the clever ways DIY solved this space problem, visit diynet.com to check the air times for the five-part mini-series, "The Ultimate Workshop II."

Ultimately, everyone's needs and wallet will determine what their shop is. And for every woodworker, the ultimate workshop is likely to be very different from his or her neighbor's.

A Tale of Two Shops

We had the chance to take a look at two woodworkers who approached their ultimate shops in different ways. We learned from them and we hope you will also.

Tom Willenborg is a children's advocacy attorney in northern Kentucky in his early 50s who has been woodworking for 30 years. While his wife abandoned their basement to his hobby in 1990, it wasn't until two years ago that he decided the space could be used better. So he excavated the floor to gain ceiling height and added a two-story loft for his ultimate shop.

The second shop belongs to George Jaeger, who worked as a human resources manager for 38 years at an international machinery manufacturer. While woodworking was always a hobby, it wasn't as all-consuming until his retirement in 1992. He and his wife moved into a fairly new house that included a 32' x 40' barn that screamed to be turned into a woodshop.

High-tech, High-concept

Willenborg's shop is hidden in the basement of his 1927 farmhouse. Formerly part of a large parcel of land, it now sits on about an acre with urban sprawl and a widening road encroaching.

His basement workshop underwent changes during the 10

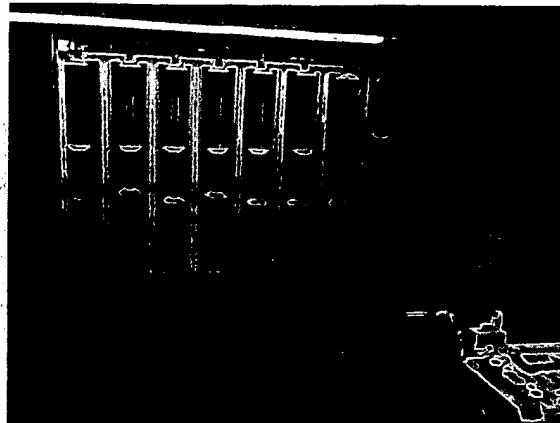
years he'd been woodworking there. A non-load bearing wall had been removed to gain some space and a crawl space had become a room for a dust collector and bathroom.

But after 10 years stooping under heating ducts, he decided it was time to do it right. He removed the concrete floor and dug down 12". It was a messy job that he doesn't recommend, but it was the cornerstone of his plan for his 1,250-square-foot shop.

To gain even more head room, he sunk his central dust collection ducting in the new concrete floor, choosing 8" PVC pipe for the main run, and 6" and 4" branches running to the individual machines. Oneida Air helped him plan the system, and he added the new Ecogate automatic blast gate system to the 16 drops in the system.

The main assembly room (opening photo) lets in natural light through rooftop skylights. Double doors serve as the entry to the shop. The cabinetry offers an amazing amount of storage,

The clamp wall allows Willenborg to glue up lots of solid panels efficiently (they can be mounted in the rack in two horizontal tiers) without dragging clamps all over the shop. When glued up, the panels are tucked against the wall and out of the way.



while still leaving space for assembly and finishing. It also has a cleverly tucked-away router table built into the island top.

The work flow in Willenborg's shop was a compromise. While each room has a purpose, the flow is backward from tradition, with his lumber storage furthest from his jointer and table saw.

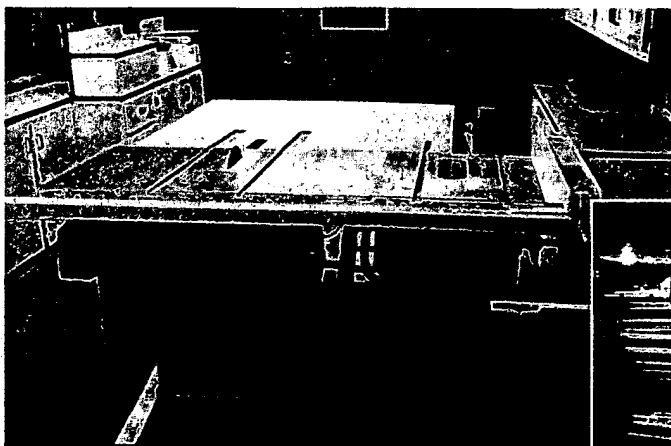
Willenborg decided that with his busy job as an attorney, the time in the shop was too short to be spent setting up tools. So all his machinery is dedicated to one purpose. There's no drill press with a mortising attachment here. In fact, he even bolted a second table saw to his main saw, making it a combo machine with a dado stack always at the ready.

You'll also find another time-saving device on the wall of the lumber prep room. A series of pipe clamps allows for quick and space-saving panel glue-ups.

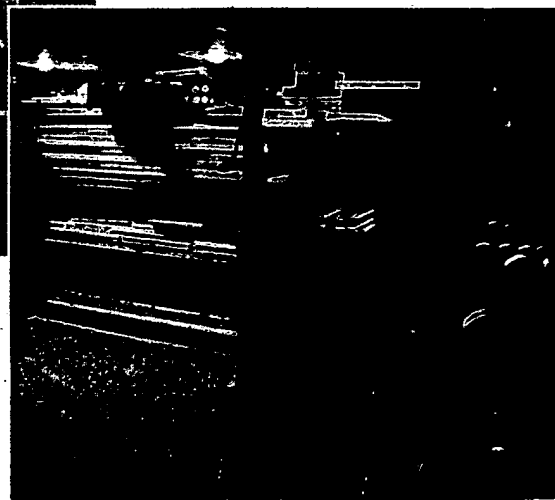
Speaking of saving time, tucked away near his dust collector room and lumber racks is a bathroom. While it took more work than the average bathroom (with no handy sewage hookup, the waste has to be pumped out), Willenborg didn't want to have to run upstairs to answer nature's call.

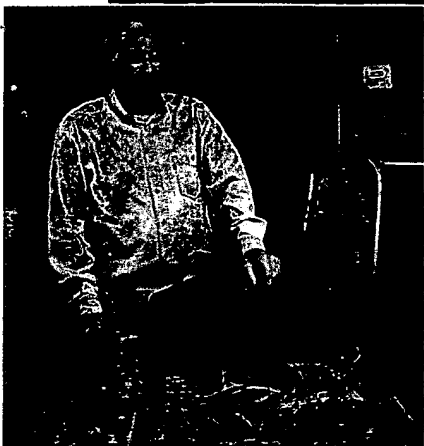
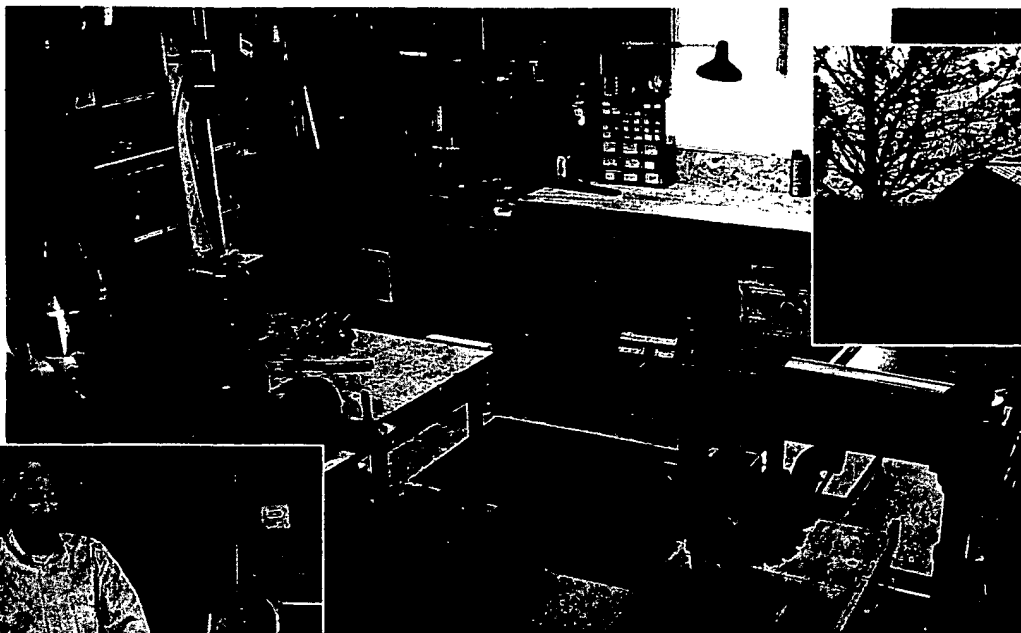
Most of the equipment in his shop was upgraded during his recent renovation as well. In keeping with his ultimate plan, all the machinery is top-quality and even color coordinated.

Is this a lot of work just for a basement shop? Well, working within the given constraints, Willenborg built a shop that he's happy to spend as much time in as he can. While it might not be yours, it is his ultimate shop.



Woodworkers are nothing if not creative. One fine example in Willenborg's shop is the double table saw (above), combining a standard 10" cabinet saw with a 10" contractor saw mounted in the right-hand wing. Willenborg leaves an 8" dado stack set up in the contractor saw constantly to save time. The well-organized and fully stocked lumber racks (right) show a good sense of organization and recycling. The racks were purchased from a going-out-of-business home center store. A good assortment of clamps are tucked out of the way behind the lumber, but still within easy reach.





Why is George Jaeger smiling? Well it could be the excellent deal he got on the complete Stanley 45 plane lying on his bench. Or it could be the majestic view surrounding his enormous stand-alone shop (right). Either way, when you look at the spacious, well-organized and well-appointed shop interior (one-quarter of which is shown above), it's easy to see Jaeger has created his ultimate workshop.

sliding cargo doors at either end and about 12' of headroom.

Inside Jaeger's shop is a great collection of machines and tools he's gathered for decades. Some of the machinery he even made himself, such as his tilting-top router table and shaper. Most of the equipment has an acquisition story behind it that shows as much joy at the getting as in the using.

The 1,280 square feet of storage in his shop is almost an embarrassment of space. In fact, there's so much room in his shop that Jaeger stores his fishing boat below his lumber racks.

Gimme that Countryside

While Willenborg chose to make the most of his existing house, Jaeger and his wife chose their "retirement home" with an existing barn in mind for his shop.

As you approach Jaeger's place along the back roads of the northern Kentucky countryside, you can appreciate the beauty and solitude. You might also think of the distance to the nearest lumberyard. For some woodworkers, that distance might be too far.

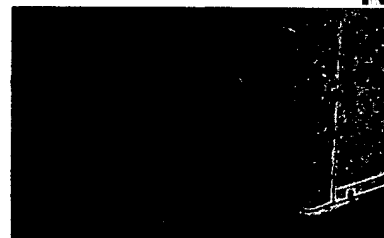
The Jaegers' home had been built with all the contemporary comforts only a few years before, and the former owner had added an ample barn (32' x 40') with

The shop has most amenities: heat (no air conditioning ... yet), excellent lighting from both windows and a score of both fluorescent fixtures and incandescent task lights (it seems fluorescents do funny things to spinning forms on the lathe).

There's one thing missing, however. During our visit, Jaeger's wife suggested that we "make use of the facilities" before heading out to the shop.

While Jaeger also recognizes the importance of adequate dust collection in his shop, his solution is a bit lower-tech than Willenborg's. A large filter-bag dust collector is tucked away in a closet, with a special access door to change which blast gates are open. Jaeger did add an extra window to the "closet" to avoid losing any natural light.

A nice collection of hand tools round out the shop's equipment. It's Jaeger's ultimate workshop. You might have different ideas for your own shop, but that's the beauty of woodworking. It's a little different for everyone, and what we bring to it makes it our own, ultimately. **PW**



Willenborg took advantage of being able to create what he needed in his shop space. The Oneida cyclone dust collection system (above right) is built into a separate room, with the ducting running under the poured concrete floor. Where the ducting meets the machines, he incorporated Ecogates (above) that automatically open and activate the cyclone collector when the machine is turned on.

Jaeger wanted efficient dust collection, but also wanted it tucked away. His dust collection room was built out from the existing wall, forming a bump-out with worktop space on either side. To avoid losing any of the natural light pouring in from the windows, he added an interior window to the bump-out. A lift-off door panel (shown removed at left) allows easy access for emptying the bags. A small Plexiglas access door (far left) lets him not only see which blast gate is open, but allows easy access while still keeping the room sealed.

